

Title (en)

METHOD AND APPARATUS FOR PLATING AND COATING AND ARTICLES SO PRODUCED

Publication

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Application

**EP 86301836 A 19860313**

Priority

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Abstract (en)

[origin: US4600662A] Method and apparatus for the coating of a substrate wherein the following chronologically takes place under vacuum conditions: (i) non-oxidized plating material is deposited on the substrate via ion vapor deposition; and (ii) a coating material is chemically bonded with the non-oxidized plating material. The coating material may comprise a primer, which chemically bonds with the non-oxidized plating material, and a polymer, which impregnates the primer-prepared plating material. Said polymer may also chemically bond with the primer. Alternatively, the coating material may comprise an epoxy which forms an organo-metallic bond with the plating material. In another embodiment of the invention, the coating material may comprise boron trifluoride, which chemically bonds with the non-oxidized plating material, and a polymer, which impregnates the boron trifluoride-prepared plating material. Alternatively, the coating material may comprise calcium, silicon, and oxygen which chemically bonds with the plating material. The coating material may be bifunctional, in that it not only chemically bonds with the plating material but also bonds with a second coating material, yielding a chemically bonded uniform coating with desired results.

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